International Journal of Economics & Business Administration Volume I, Issue (4), 2013

pp. 17-30

A Theory on the Urban Rural Migration

Theodore Papaelias¹

Abstract:

The internal migration consists one of the major problems that a geographical region faces during the transition process from the traditional way of production to the modern one. Therefore it attracts wide attention in contemporary literature. The purpose of this essay is to prove first of all that the rural urban migration process - contrary to the neoclassical doctrines- cannot be analyzed in the absence of the economic development and the formation of primitive accumulation concepts. Second -contrary to the classical and neoclassical doctrines and the considerations developed in the context of Marxist theory – the migration operates in a selective way. The population surplus does not move (the marginal person according to the academic theory), on a contrary the typical peasant is driven out (or the middle worker), leading to several economic and social consequences for the rural areas. The causes stem from the fact that migration is a non-harmonic mechanism. In latest stages the development of the modern sector (industries- services), via exploitation of agriculture (appropriation of 'produit net'), destroys the traditional way of life in the mainland (in which rationalism is being "introduced"), while the appearance of development poles makes the cities attractive to rural population. The two factors pulling- repulsion are dialectically associated, having as a result the impressive urbanization of the recent years.

Key Words:

Rural-Urban Migration, Harmonization Mechanism, Rationalism, Surplus, Paradigm

JEL Classification: F22, O18, R23

¹ TEI of Piraeus, e-mail: thpap@teipir.gr

1. Introduction

The theory of migration that prevailed in the antiquity, concentrated its main concern to the "pull" factor. Traditionally this was established as the Classical Theory. The case of the poor peasant going to town in order to "find a better future" depicts the rough scene of the theory. Ranging from the freedman or the plebeian of the Roman era² to the provincial of our times, the same motives existed. The "city lights", the thrilling life, the fast and easy creation of wealth, the freedom that anonymity offers, the easiness of establishing numerous businesses (various services, commerce etc.) are some of the most important causes related to urbanism.

2. Classical and Neoclassical Views

2.1 The pioneers

In the 1950s³ and onwards, a different view became widely accepted. According to dualism, the economy consists of two sectors: the backward or agricultural sector and the modern or urban sector.

Growth became identified with industrialization and the problem was transformed: First, in finding a way to ensure, in the capitalistic sector, a growing supply of labour force and second, in finding a way to transfer the economic surplus into the modern sector.

In underdeveloped areas, due to their structure, 50-80%⁴ of their population is engaged with agriculture. The underemployment of that population⁵ was taken for granted and so was the internal migration of a large number of the labour force in the urban sector, without reducing the agricultural product. The marginal productivity in agriculture was assumed to be equal to zero, (the basic assumption of the model is that only a limited number of agricultural workers migrate).

² The serf that escaped from his master in the land fields and went to the city that promised "numerous opportunities", the farmer of the 19th century that abandons his village in the northern countries – Scandinavia, Germany – can be used as first class examples from the supporters that argue for the importance of similar examples.

³ The birth of new countries of the so called Third World imposed in a direct way the problem of economic development. Many of strategic growth models evolved and inevitably they paid more attention in demographical movements. So, agriculture that from early times, even before the Physiocrats, was dealt as a source of human and material resources, now was put in the core of the research.

⁴ In some cases it exceeded 90% (like in many African countries).

⁵ Many researchers dealt with the measurement of surplus labour. The classical contribution belongs of Rosenstein-Rodan (1943).

So, according to Lewis⁶ and his supporters, in the traditional sector a surplus of labour force always exists. If the modern sector offers wages above the subsistence minimum, then it could have as much labour as needed⁷. The continuing outflow of labour force from the agricultural sector (from a point and on starts to drain the pool of labour), had as a consequence the increase of wages in the modern sector⁸.

Statistical evidence proves the deception of conditions, on which the model is based. Bettelheim *et al.* transfer the inability of the central planning while Dale Jorgenson the experience of the neoclassical economists. According to C. Bettelheim: "what we have to stress, in the case of China, is the fact that finally despite the existence of an apparent surplus in labour force, the maximum number of workers that can migrate to the cities, without jeopardizing the agricultural production (while the technical conditions of production remain stable is limited in first view... It is accepted, that the real surplus of labour force that we can use as a source of increasing the percentage of accumulation, is fairly limited...."

According to Jorgenson⁹ mobility of agricultural population with a loss in agricultural production exists due to the fact that marginal productivity in agriculture is greater than zero. The doctrine regarding the redundant labour force in agriculture ¹⁰ was introduced by Rosenstein-Rodan, who was a pioneer in many points of view¹¹.

⁶ The article of Lewis (1954) created a great concern to the economists, who at that time were involved only with the developed countries.

⁷ Someone could argue- Lewis admit that in part- that growth that depicts from his examples, its nothing more than the representation of known and acceptable situations in a scientific manner. Lewis example "This essay is written in the classical tradition, making the classical assumption, and asking the classical question. The classics, from Smith to Marx, all assumed, or argued, that an unlimited supply of labour was available at subsistence wages" (Lewis, 1954), pp. 139......"The neo-classical model (including the Keynesian) when applied to such economies gives erroneous results" ibid, p. 190

Among the radical economists Lewis analysis gained reputation, given that its consistent – until a certain point- with the position that a continues growth of employment *ceteris paribus* will increase the surplus, a view that is consistent with that of Marxists. It has to be noted that beyond any inconsistencies of the model, the main points that capsize the model are: 1) the industrial employment increases with lower rates in contrast to the capital accumulation having as a consequence the rise of unemployment and 2) the problem that Less Developed Countries faced during the 70s was the employment in the cities rather than the dependence of the labour force from the agricultural sector and its shifting to non-agricultural sectors. The high rates of unemployment made the model unrealistic therefore its study was only of historical importance.

⁹ The influence of Jorgenson (1961), (1967) was exceptional.

¹⁰ In Greece, for example, the studies of Pepelasis and Yotopoulos proved that the potential of migration of the rural population, without any loss in the (agricultural) product, were minimal and almost in no time it was exhausted having as a result in the 60s the appearance of a shortages in the labour force [Pepelasis, Yotopoulos (1962), Sakellis (1983].

Following this perception Mandelbaum (1945)¹², Nurkse (1953)¹³ and almost all the economists that dealt with the question of growth in the 1950s and in the early 1960s, found insusceptible the suggestions purporting that in agriculture a big surplus of labour exists.

The failure of Lewis and Fei and Ranis¹⁴ models to explain the facts and more specifically the concentration of big human masses in cities, with only a minor increase in employment in industry, the ongoing arrival on migrants despite the huge unemployment, the small increase of the industrial and the stagnation of the agricultural product and simultaneously the significant deviation of the typical migrant from the "ideal" peasant, that the theory refers to, gave a momentum in the construction of models that assume that the rural-urban migration as a choice of investment in the human capital¹⁵.

These neoclassical models accept that ¹⁶:

- People change residence due to wage differences: since wages in cities are, considerably, higher, it's logical to attract more people.
- The distance from pôle de croissance plays a crucial role in the decision to move

This continuous flow will lead to increased wages in the traditional sector and will lower or keep constant equivalent ones in the modern sector¹⁷.

¹¹ One of these began with the estimation of surplus labour force in the developing areas: Rosenstein-Rodan (1943) (1957).

¹² Together with Rodan, they constituted the initiative so as the interest of other economists and political cycles of that time to concentrate on the problems of poor areas.

¹³ Nurkse with Lewis and Baran had the greatest influence in the economists of the '50s and '60s.

¹⁴ Another representation of the model of Lewis was introduced by Fei and Ranis (1961).

¹⁵ The classical researches of the model regarding Human Capital are attributed to Schultz (1960) and Becker (1962).

¹⁶ These models enroll in to Marshallian analysis, meaning that they are models of partial equilibrium They don't examine migration in relation to the economic boom (take off) of the developing countries like for example Lewis's model, but they take as a fact that economic deviations between the rural-urban sector exists, so every individual in order to maximize its personal benefit migrates to the cities. These models deal with microeconomics aspects of migration.

¹⁷ In the end the differences among the wages will disappear (due to the market mechanism) and migration will cease. Thus, these models are consistent with the deeper meaning of neoclassical economics. Despite that they display an inconsistency. Since the "most capable" (according to the Human Capital Model the possibility of the people migrating being, either of a young age or of a higher educational level is higher than the possibility these people being older or of a lower educational level) labour force migrates it follows that the deviation between the place of outflow (countryside) and inflow (urban) will continually rise. But then migration can be thought of an unbalanced mechanism. This on the other hand comes in

2.1. The Neoclassical concept after the Theory of Human Capital

Despite migration, the wage inequalities not only didn't shrink but on the contrary were increased creating simultaneously the "paradox" of having continuously growing rates of unemployment parallel to growth of migration.

Todaro tried to introduce the possibility of finding a job, so as to eliminate the bottleneck of this an orthodox phenomenon in the 70s. So he accepts that:

$$\Pi = \frac{\gamma . N}{S - N} \tag{1}$$

where:

S= total labour force in the urban sector, Π =possibility to find a work in this sector, γ = the net rate creation of new jobs in the urban sector, N=total employment in the urban sector.

If W is a real wage in the urban sector and Γ the average real agricultural income, then the expected agricultural-urban (real) difference of income **d** is equal to (Todaro, 1969; 1971; 1982):

$$\mathbf{d} = \mathbf{W}. \ \Pi - \Gamma \tag{2}$$

Various researches testing Todaro's model concluded that a policy of reducing the difference among wages of the two sectors is necessary, if migration is to be reduced. Despite the delicate approaches that have been made and the numerous implications (Byerlee, 1974;, Knight, 1972;, Levy & Wadycki, 1974;, Barnum & Sabot, 1977;, Sahota, 1968) of the model of Human Capital, the latter fails to illustrate adequately the facts.

In a way, migration theory could be seen somehow as an equivalent to Say's law for commodities. As the view that considered an overproduction of commodities impossible, failed, similarly the various models interpreting why migration continues despite the huge unemployment rates and the increasing wage inequalities. Todaro's model introducing the possibility of finding a job in the urban sector accepts some rate of unemployment despite the continuing migration. However the role of the possibility of finding a job is minor compared to the real extent of the problem. For example the caravans of peasants that will travel to Bombay will stay there despite the fact that the possibility of finding a job is trifling.

contrast with the neoclassical theories.

3. A Different Paradigm

3.1. Agriculture and economic development

In order to understand the mechanism of the agricultural exodus it is necessary to analyze the following:

- Why are wage inequalities created?
- How are they created?

The above mentioned models recognize that the migration emerges due to wage inequalities, but failed to explain why these exist. Hence, a solid conception and interpretation of migration lacks since these consider wage inequality as a priori principle. That they have started to discover is presented as a fact and therefore research ceases before it begins.

This is not something random since orthodox economics are basically static and whichever dynamic is only depleted in linear depiction. That was an inevitable cost of the pure theory¹⁸. One interpretation of migration is that it is only then possible when it is analyzed together with the developmental process and the role of agriculture in the modern economic system is examined.

Agriculture has the following limitations:

- i Land is limited
- ii. The law of diminishing returns holds despite the technological advances

There are two factors that constitute the agricultural sector inferior in comparison to non-agricultural.

- a) Since demand for industrial goods is increasing faster than that for agricultural goods the modern sector expands more quickly.
- b) Technology used in agriculture is product of the industry, having as a result the extensive dependence of the former to the latter.

Generally, due to the socio-political system, as well as technology, the development of the traditional sector is led by urban and not endogenous decision centers; that is farmers and agricultural co-operatives.

Under current production conditions (family land exploitation) the agricultural sector is diminished by the non- agricultural one.

In this way, the latter gains the necessary surplus for its development. That is achieved either by the increase of the unequal terms of trade for agricultural products (in regard to other products) or through heavy taxation of the agricultural sector.

¹⁸ At Meier and Baldwin's book (1957) there is a good presentation of the axioms upon which the neoclassical school is based

Historically, development¹⁹ was achieved through the transfer of resources from agriculture to industry that in order for it to expand required a continuously augmenting capital for the various investments to be covered²⁰.

In an underdeveloped region, where the working class constitutes a small portion of the total population and therefore the potential of obtaining revenues through taxation etc. is limited and where the industrial product also constitutes a small portion of the total product, the major part of the surplus is derived by the squeeze of agriculture.

Therefore, the problem of industrialization and more specifically of its financing is transferred to how an ever increasing surplus in the agricultural sector would be produced in order for that to be channeled to the non-agricultural one.

For example, through the rise in productivity, the surplus increases. Nonetheless, neither taxation nor the decrease or stabilization of actual prices leads to substantial improvement of the agricultural income. Under these conditions farmers need to produce an even greater product, in order to counterbalance the loss in profit per product of unit. This results to the "stagnation" of the agricultural product. Mechanization that is reinforced by the state through loans and other subsidies makes underemployment even more intense. Unavoidably in an even larger agricultural mass the tendency for migration to the cities, where the fast growing urban sector provides better living conditions, emerges.

However the squeeze of agriculture has two sides: The agricultural surplus is exploited and transferred to the non-agricultural sector. As a result of this squeeze comes the agricultural exodus. Therefore the traditional sector is stripped off not only from the material but from the human resources as well.

The one that suffer the most from this squeeze are the middle farmers²¹ and from these do most migrants come from. The middle farmer due to the low profit (or often

¹⁹ Marx: Das Geheimnis der ursprünglichen Akkumulation, (The secret of primitive accumulation) (1867), capitel 24.

²⁰ Most economists of the East European countries have influenced by the theories of Preobrazensky, treated agriculture and primitive accumulation in a way similar to that of the Neoclassical (Preobrazensky, 1920).

²¹ The *middle* farmer, as in regard to Greece, is the one that owns 3-10 hectares. The *marginal*, as well as the paid farmer, is the one that owns up to 1 hectare of land and the *upper* the one who own more than 10 hectares of land. (Note: the mid arable land is 3,6 hectares). It should be noted that during the period 1951-71 greenhouses were not developed in such a degree that the above mentioned land limits to be altered. Moreover specialization on specific cultivation species with high demand and therefore high prices was not developed as to create a contradiction to the limitations accepted.

due to its absence) usually migrates. Therefore, he who accepts to cultivate land, that is not profitable and having also to pay for rent, is only the marginal who lives below the socially accepted subsistence minimum. Middle farmers are the possible migrants. Most of them will follow the same course towards the city. They do not have any money and are not interested in buying land. There is one more reason why the middle farmer may wish to migrate: The cost of change of residence is quite high. The migrant when going to the city enters the army of unemployed and seeks for work. The marginal farmer²² usually lacks that income.

Consequently:

i. Migration is an inevitable and essential product of economic development Inevitable due to the developmental squeeze that blocks the way of the middle farmer towards an economic and social rise within the agricultural sector. Essential because it ensures the necessary labour force to the continuously growing nonagricultural sector. It creates the pool of unemployed that results to the stagnation of the blue collar workers wages.

ii. Migration is an outcome of the repulse from the agricultural sector and not the attraction from the urban.

If the excess labour force migrated, then it would be an effect of attraction. Nonetheless, as it seems, it is the middle farmers forced by the repulse of agriculture and due to the latter's squeeze are driven to the cities. That is also confirmed by the development rate of the industrial labour force that despite massive migration it only slightly increased²³.

It must also be mentioned that increased costs (inflow prices from the modern sector constantly increase i.e. pesticide, fertilizer and machinery prices) as well as lower prices in regard to other commodities for even greater quantities, constitute a determinant factor. The farmer is grounded down (he stayed under the Caudian Fork). He increases his investment (reinforced by the government, the Agricultural bank and driven by competition)²⁴ and he expects, at least at the beginning that increased investment will lead to per unit larger product and therefore increased

²² In Greece, for example, according to the data from the censuses between 1961-71 paid farmers decreased of 100.000 and active population who own till 1 hectare by 50.000-60.000, while the total agricultural labour forces by 650.000. If the members of the families of the migrants are encountered, then the rural exodus exceeded 1.100.000, from which 800.000-850.000 beyond the middle farmers (for simplicity reason quantitative evidence refer only to the Greek case in the years 1951 and 1977). More analytically see: Papaelias (1979).

²³ In Greece from 480.000 in 1961 it reached 550.000 during 1971.

²⁴ Investing in an increasing climax, otherwise he will be forced to sell part of his land in order to be able to cope with the worsening conditions i.e. increase in wages due to the rural exodus. The number of articles and monographs referring to this developmental squeeze is huge. Owen made an exceptional presentation (1966).

profit. However, profit is minimized due to the fact that prices are controlled by the state. Land rent and profit on capital are nearly diminished²⁵.

The fact that "victims" of the rural exodus consisted fertile land with the most profitable cultivations²⁶ was considered by experts as a paradox. The causes of migration have not yet been understood. Even economists, such as Baran (1964), influenced by the ideological ruminations, accepted the importance of the classical theory. Therefore, accepting the Marxist atmosphere in the communist manifest – suitable for propaganda- sets the city and the country side, industrial and agricultural ²⁷ labour to a diametrical opposite position.

He claimed: "This in turn points to another complication which was arisen in the Soviet Union as well as in other industrializing socialist countries. It stems from the fact that the industrialization of an agricultural country, particularly in its early phases, involves quite naturally the "glamorization" of industrial work, its acquiring greatly enhanced prestige and attractiveness. Large new industrial plants, tremendous power developments revolutionizing the lives of entire regions, thrilling technological achievements move into the centre of national (and international) attention, become objects of intense -and justified- pride, and are allotted a preponderant proportion of publicity, of the government's political and organizational effort, and of scarce administrative and scientific talent. By comparison, the plodding day-to-day drudgery of agricultural work recedes into the grey and dull background of social existence. A young man or woman of ambition, ability, and energy no longer wishes to remain "stuck in the mud" of the agricultural backwaters, to stay confined to the "idiocy of rural life" and be limited in his or her growth and development to what can be achieved even in the most progressive agricultural community. The lure of the city, of its opportunities for material and social advancement, education, participation in cultural activities and plain fun, as well as the desire to become a member of the industrial working class – the most respected stratum of society – exercise an all but irresistible pull on the younger generation. The result is that agriculture becomes increasingly abandoned by its best

²⁵ The discussion was resurged in the 70s. That was not a paradox; it was considered that the prevailing tendency in capitalism would also hold for the agricultural sector. The US example was clear. Economists, pillars of pure economics and defenders of the free market supported either the nationalization of land (Walras) or diminish of landlords through free trade (Ricardo). Land rent was considered an obstacle to the development of capitalism.

²⁶ The main areas of rural exodus were Macedonia and Thrace with a respective 68% and 82% fertile and irrigated land (the main rivers of Greece are situated there). On the contrary poor and barren regions such as Arkadia and Lakonia presented a much lower migration percentage, despite historical reasons that contributed to that.

²⁷ Marx in his Manifest overemphasizes the role of the bourgeoisie that takes people out of the "swamp of the idiocy of the rural life", and becomes a weak point for the intense analysis of the city-countryside relation and the migration mechanism. Furthermore in his book "Das Kapital", he has refused this concept (The primitive accumulation, Chapter 24).

potential workers, and left to elderly people or to those who do not have the imagination, the enterprise, and the drive to move into the "big, wide world" (Baran, 1973).

3.2 The antithesis between city and village

However the migration mechanism described, does not end at this point. At the first stages of the squeeze of agriculture "rural exodus") repulses mainly people were involved in it. The analyzed process has multiplying results. Migrants are followed by their families. Taken the squeeze of the traditional sector as granted the decrease in the agricultural population has as a result the shrinkage of exchanges, the decrease in demand and therefore the decrease in the income of the non-agricultural businesses (i.e. artisan, manual labour) that exist in the community.

Two perspectives are created: either to enter the proletariat or migrate. Therefore not only is the farmer lead to migration but also the population related to him. The effect of this process also affects the towns. In today's underdeveloped regions most of the towns are commercial and not industrial centers. Therefore when the inland of a town is abandoned by its agricultural population (towns are economically independent by this population) the market is shrunk, demand decreases commercial capital profit diminishes, investments are suspended and depression is the result. Most of the entrepreneurs turn to the cities. In this way the inequality between the industrial city and the countryside increases since commercial towns are abandoned by residents and thus decline.

Development does not reduce the inequality of the industrial centres towards the countryside (= commercial town+ countryside) as most economists considered, but it actually makes it larger²⁸. Capital is oriented towards where profit is higher (industrial city) and the labour force towards where wages are higher (industrial city). In the same way the separation of the wage from capital- a prerequisite for the succession of the new system- when achieved multiplies and expands, so does the concentration of activities in some places multiplies and growths the inequality between the centre and the countryside.

As a result:

Cultural and social life is concentrated around these centres that monopolize all expressions of life. For example, the government, universities, banks, research institutes, theatres etc are all gathered to the centres.

But there is one more endogenous reason that assists this centralization. It is the authoritarian system that due to the development of capitalism becomes the

²⁸ The Neoclassical views are clear: The goods (and the benefits) of development are diffuse all along the economy since development "penetrates" and expand (trickle-down effect). For more details: Meier and Baldwin (1957).

prevailing form of ruling. The local authorities have no essence. The parliament, the Supreme Courts, the government, various ministries etc are often gathered in one place and their authorities suppress that of the local.

In that case the country consists of two parts: the center and the countryside, which is by all means subservient to the first and their relations could be easily considered as relations between a metropolis and its colonies²⁹. Close to the economical causes social reasons grow, that forces the middle farmer to abandon his land.

This is the continuous contrast between the city and the periphery. The village used to be a self-sufficient society. The remaining (the ones that haven't yet migrated) famers are forced to get increasingly more inflows from the modern sector. In that way they become even more dependent. The labour division in the traditional sector and the mass production of non-agricultural products from the city – having as a result low and competitive prices for the craftsmen or even the farmers – the new life conditions, with new the expectations they create, dissolve the wholeness of the traditional way of life, supporting the introduction of money (pecuniary economy) as a way of economic exchanges in the agricultural production. The village becomes increasingly dependent from the city, the farmers of the bourgeoisie and the agriculture of industry.

The social dismantling comes as an inevitable supplement. The communications, the mass media, the "civilization" creates the rationalization of the countryside: that is to say the rationalism in agricultural relations (=cost accounting of all products and relations). The means of entertainment, education, etc. in the countryside continuously diminish or even vanish. Under these conditions, it is hard for the village (and in general the countryside) to satisfy the needs - mostly new needs - of an individual. Those left behind are mostly senior people and the phenomenon of "dead villages" appears.

4. Conclusion

To summarize the motives of the agricultural exodus:

The inevitable result of the almost total exploitation of the agricultural products' surplus is the formation of barriers for the economic growth of the middle farmer.

Rapid urbanization is the consequence. Economical causes are the major levers of the migration mechanism. As a result of the growth of capitalism is the subjection of agriculture under the industry and the expanding contrast between the city and the countryside. The "dissolution" of the closed village society, the violent introduction of new social conditions breaks the autonomy, the self-sufficiency and the introversion of the community. And so gradually next to the repulsion from the

²⁹ The phrase "Paris et desert français" adequately describes what is being said.

countryside that causes the squeeze of agriculture, the gradual increased attraction to the cities is introduced in later stages.

The two factors –pulling and repulsion- start affecting each other and at the end they correlate in such degree, that convert migration from a need for finding a better future, to a desperate escape, in a biblical exodus, that forces thousands or even millions of peasants to congest irrationally in to towns, searching for a job and living under miserable conditions³⁰.

The unplanned "elicitation" of the agricultural surplus -that at some point takes the form of embezzlement- and of it being wasted or not invested in productive investments³¹ and dependent growth of the underdeveloped³², have as a consequence a gradual increase of employment in the urban sector. So in Third world countries migration and unemployment co-exist with the significant variations among the wages of the two sectors³³.

Table 1: "Rural Exodus" and Migration

1951-19611961-19711951-1971"rural

exodus"520.0001.110.0001.630.000Migration400.000910.0001.310.000Source: Papailias, 1979 Note: By migration the rural-urban movement is meant, while with rural exodus the flight of the population from the countryside to the cities and to foreign countries.

Table 2: Emigration

1951-19611961-19711951-1971Agricultural Sector85.000285.000370.000Total208.000460.000668.000Source: Papailias (1979)

Sector123.000175.000298.000Urban

Note: Numbers refer to net emigration that is gross emigration-repatriation. Total gross emigration came up to 1.070.000 the period 1951-1971 (1961-71:830.000, 1951-61:240.000), while repatriation came up to 402.000 (1961-71: 370.000 and 1951-61:32.000). In similar results came up Vergopoulos (1975), Siampos (1969), Valaoras (1980).

- ³¹ The first to thoroughly analyze the issue was Baran (1954). In cooperation with Sweezy he continued his reasoning for the developed capitalistic countries as well, (Baran, Sweezy, 1965).
- 32 The number of these theories and the criticism received are unlimited. What is basically meant here is that the strategy followed was such that increased the use of capital goods having as the result the enlargement of capital accumulation to create a smaller number of employees (technical unemployment.
- ³³ Greece did not undergo an overpopulation explosion and that is why examining the Greek phenomenon can clearly indicate that overpopulation constitutes only a parameter and not the cause of the migration and the urban unemployment. The slums and ghettos were not created, not due to the symmetrical urbanization or employment opportunities of the non-agricultural sector, but due to emigration that constituted a sheet-anchor (Deus ex machina). Over

³⁰ According to Davis & Herz (1956) and the United Nations (1957) while in 1800 the urban population around the world was barely reached 3% of the world population, in 1850 it rose to 6,4%, in 1900 in 18,6%, in 1950 in 28,9%, in 1980 in 41,1%, in 2025 it's expected to overcome 65.2%. It can be clearly seen that urbanization is a phenomenon of our times. Tables 1 and 2 show the movements in Greece between 1951 and 1971.

References

Baran, P. (1957), The political Economy of Growth, Pelican, 1973.

Baran, P. and Sweezy, P. (1966), Monopoly Capital, Penguin, 1973.

Barnum, H.N. and Sabot, R.H (1977), "Education, employment probabilities and rural-urban migration in Tanzania" *Oxford Bulletin of Economics and Statistics*, No 2, May, pp. 109-126.

Becker, G.S. (1962), "Investment in human capital: a theoretical analysis", *Journal of political Economy*, Vol 70, pp. 9-49.

Vergopoulos, K. (1974), Le capitalisme difforme et la nouvelle question agraire. L'exemple de la Grèce moderne.

Bettelheim, Ch. et al. (1976), La construction du socialisme en Chine.

Byerlee, D. (1974), "Rural-urban migration in Africa", International Migration Review.

Davis, K. and Hertz, H. (1956), Patterns of World Urbanization.

Fei, J.C.H and Ranis, G. (1961), "A theory of economic development", *American Economic Review*, Vol. 51, September, pp. 533-565.

Hirschman, A.O. (1958), The strategy of economic development, Yale.

Jorgenson, D. (1961), "The development of a dual economy", *Economic Journal*, June, pp. 309-334.

Jorgenson, D. (1964), "The role of agriculture in economic development: classical versus neoclassical models of growth", in Wharton, C.R (edit), *Subsistence Agriculture and Economic Development*, pp. 320-348.

Knights, J. (1972), "Rural – Urban income comparisons and migration in Ghana", Oxford Bulletin of Economics and Statistics, May.

Levy, M. and Wadycki, W. (1974), Education and the decision to migrate: An econometric analysis of migration in Venezuela,: pp. 379-389.

Lewis, W.A. (1954), "Economic development with unlimited supplies of labor", *The Manchester School of Economic and Social Studies*, May, pp. 130-91.

Mandelbaum, K. (1945), The industrialization of backward areas.

Marx, K. (1867), Das Kapital, Dietz Verlag 1977.

Meier, G.M. and Baldwin, R. (1957), Economic Development Theory: Theory, History, Policy, New York.

Nurkse, R. (1953), Problems of capital formation in underdeveloped countries, New York.

Owen, F. (1966), "The double developmental squeeze on agriculture", *American Economic Review*, Vol. 56 pp. 43-70.

Papaelias, Th. (1979), "Der unausgeglichenheitsmechanismus der Migration und Messung der Aneignung des human Kapital, Bremen", Deutchland, Dissertation.

Pepelasis, A. and Yotopoulos, P. (1962), Surplus labour force in the Greek Agriculture 1953-1960, KEPE.

Preobrazensky, E. (1926), Die neue Oekonomik, 1971.

1.000.000 emigrated within 15 years (1955-71) without encountering the volume of temporary immigration (sailors etc.) However, the development model followed lead to the concentration of the population to one or two centres that exploited the rest of the country.

- Pye, L. (1966), Aspects of Political Development, Boston and Toronto, Little Brown and Company
- Rosenstein-Rodan, P.N. (1943), "Problems of industrialization of Easter and South Eastern Europe", *Economic Journal*, June-September.
- Rosenstein-Rodan, P.N. (1957), "Disguised unemployment and underemployment in agriculture", *Monthly Bulletin of Agricultural Economic and Statistics*, FAO, July-August, pp. 1-7.
- Sahota, G.S. (1968), "An economic analysis of internal migration in Brazil", *Journal of Political Economy*, March, pp. 218-245.
- Sakellis, M. (1983), Employment in the Greek Agriculture, (in Greek), ATE.
- Siambos, G. (1969), Demographic Evolutions in Greece, (in Greek), Ministry of Finance.
- Schultz, T. (1960), "Capital formation by education", *Journal of Political Economy*, Vol. 68, pp. 571-583.
- Todaro, M.P. (1969), "A model of labor migration and urban unemployment in less developed countries", *American Economic Review*, March, pp.138-148.
- Todaro, M.P. (1971), "Incomes expectations, rural urban migration and employment in Africa", *International Labour Review*, pp. 387-413.
- Todaro, M.P. (1982), Economic development in the third World
- Valaoras, V. (1980), *The population of Greece in the second half of the 20th century*, National Statistical Service of Greece.
- United Nations, (1957), Report in the social situation, New York.